Gulf of Mexico Harmful Algal Bloom Bulletin

11 October 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: October 9, 2007

Conditions Report

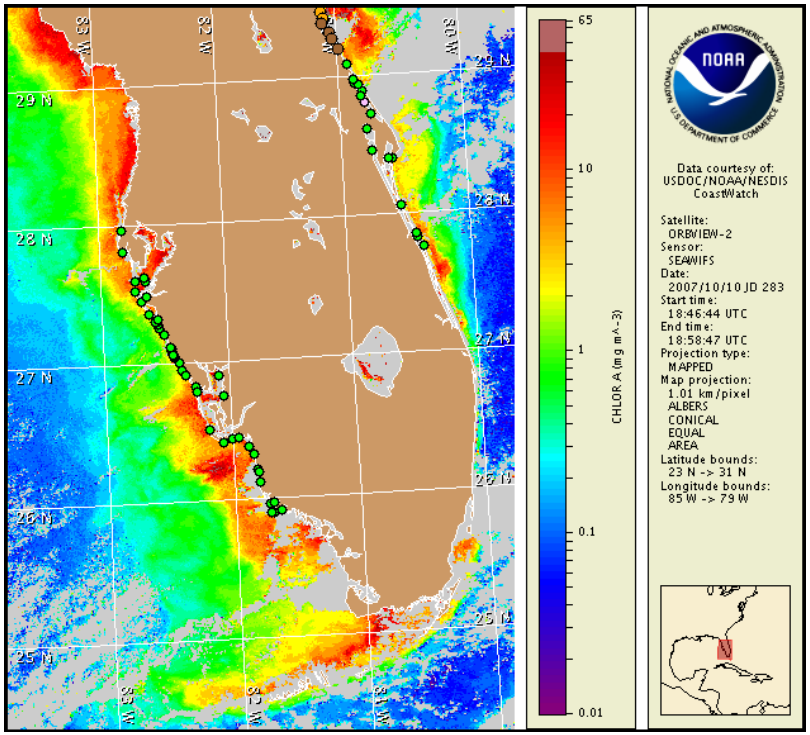
A harmful algal bloom has been identified from Nassau to Volusia County. Patchy high impacts are possible today through Sunday for St.John's County. Patchy moderate impacts are possible today through Sunday in Flagler and northern Volusia Counties. Patchy low impacts expected today through Sunday for Duval County, with patchy very low impacts expected today through Sunday for Nassau County.

Analysis

****This is a supplemental bulletin to bulletin number 64, issued Tuesday October 9 due the harmful algal bloom in northeast Florida****

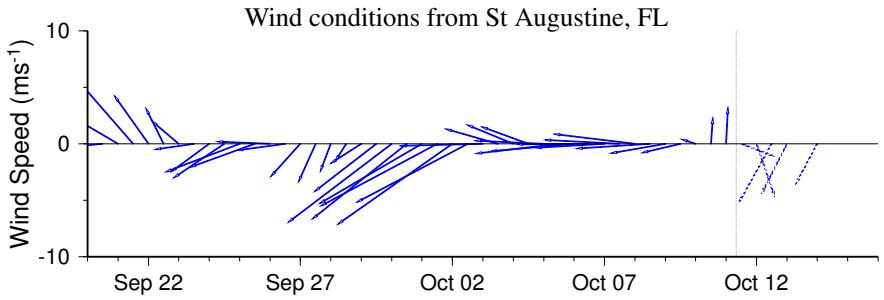
A harmful algal bloom persists from Nassau to northern Volusia County, ranging in concentration from background to very low in Nassau County, low concentrations in Duval County, medium to high concentrations in St. Johns County, and medium concentrations in Flagler and northern Volusia County (FWRI, 10/8-9). Recent samples indicate that the bloom has intensified in St. Johns County, with high concentrations reported at Fort Matanzas, St. Augustine Beach, and Crescent Beach (FWRI; 10/9). High chlorophyll levels (>20μg/L) are visible via satellite imagery(10/10) alongshore the northeastern coast of Florida from northern Duval County through central Volusia in a distinct patch ranging from 30°28'17"N, 81 °20'53"W to 29°12'37"N, 80°48'51"W along its north-south axis. Elevated chlorophyll concentrations extend as far offshore as 80° 52'33"W, partially due to mixed and non-harmful algal blooms. No *K.brevis* was detected in Brevard County this week (FWRI; 10/8). Easterly winds through Sunday will likely increase impacts along the coast. Slight southern transport of the bloom is possible through Sunday.

~Keller, Allen



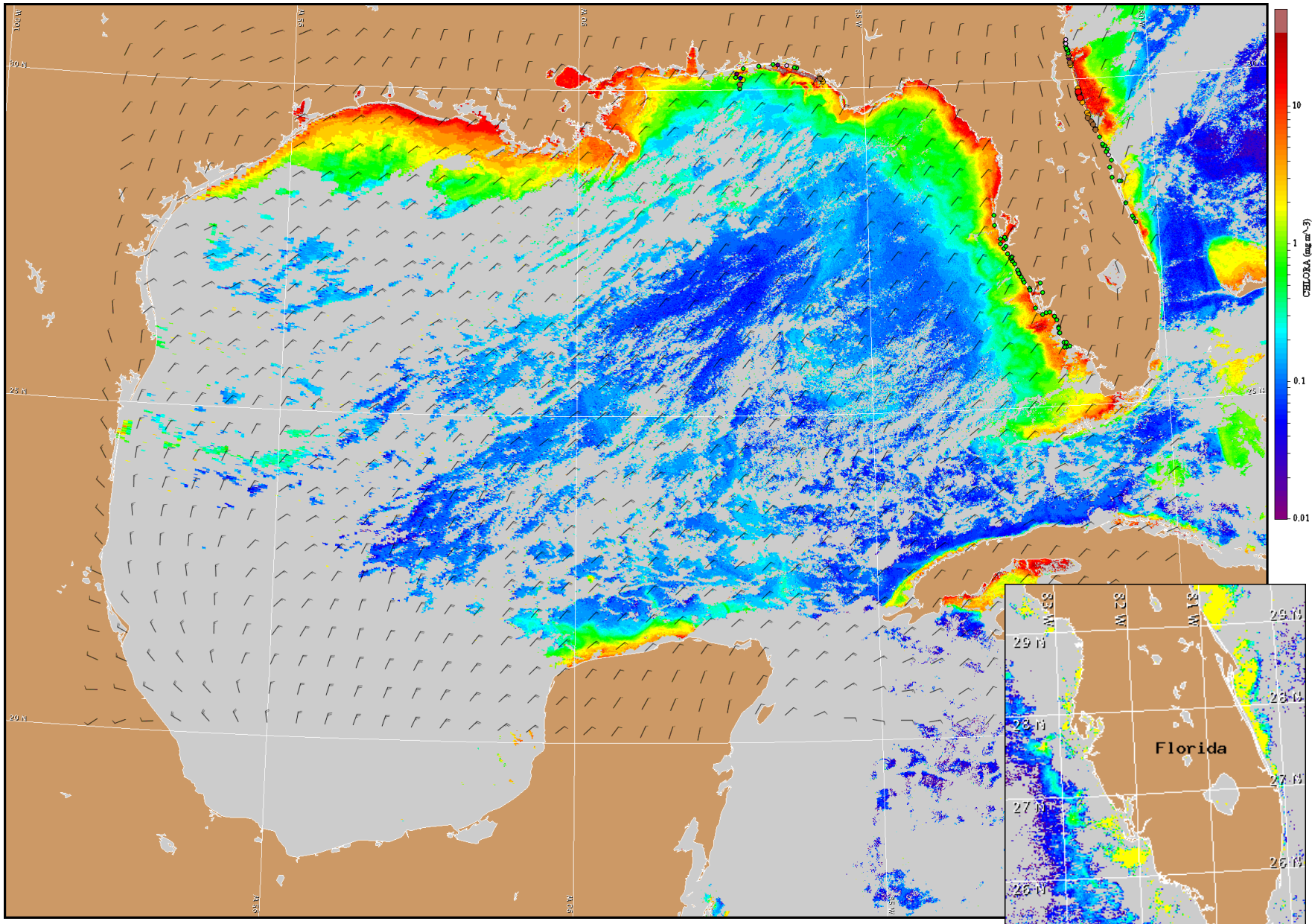
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 1 to 10 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

NE Florida: Northwesterly to northerly winds today (10-15 knots; 5-8 m/s). Northeasterly winds Friday through Sunday, becoming easterly on Sunday night (10-15 knots; 5-8 m/s).



Satellite chlorophyll image and forecast winds for October 12, 2007 12Z with Cell concentration sampling data from October 1 to 10 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf

Verifi ed and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).